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TAYLOR & AUST, P.C.
12029 E. Washington Street
Indianapolis, IN 46229

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| EXAMINER |
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NGUYEN, DUSTIN

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| ART UNIT | PAPER NUMBER |
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2154

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12/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/074,477

Applicant(s)

COMBS ET AL.

Examiner

Dustin Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,9-13,18,19,32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,9-13,18,19,32 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 9-13, 18, 19, 32 and 33 are presented for examination.

Response to Arguments

2. Applicant's arguments filed 10/23/2007 have been fully considered but they are not persuasive.
3. As per remarks, Applicants' argued that (1) Morrow does not disclose, teach or suggest a microprocessor network adapter interconnecting the at least one host computer and the at least one peripheral device.
4. As to point (1), Morrow discloses a multimedia passive adapter 40 for connecting a host system 32 and different flash media 20 having different formats [Figure 1; and paragraphs 0004, 0038 and 0039]. In addition, Morrow discloses the passive flash media adapter system 30 could be adapted for a wide variety of connections between a host system 32 and/or network connections and connections to a wide variety of devices or networks, and the enhance PC card controller 34 may provide other enhancements between a host system 32 and external devices 20 connected through the passive adapter, such as small form factor IO devices [i.e. network adapter interconnecting the at least one host computer and the at least one peripheral device] [paragraphs 0100 and 0101].

5. As per remarks, Applicants' argued that (2) Hamdi does not disclose, teach or suggest a USB hub interconnecting said at least one peripheral device and said microprocessorless network adapter.

6. As to point (2), Hamdi discloses a hub can connect directly to the USB bus 106 and then one or more peripheral devices can connect to the hub, and the USB bus 106 connects to the USB host controller 114, as such Hamdi discloses a USB hub interconnecting said at least one peripheral device and said microprocessorless network adaptor as claimed [Figure 1; col 11, lines 31-col 12, lines 7; and col 13, lines 41-49].

7. As per remarks, Applicants' argued that (3) Morrow and Hamdi do not disclose, teach or suggest wherein a microprocessorless network adapter is configured to manage power on at least one peripheral device.

8. As to point (3), it is rejected for similar reasons as stated in previous Office Action. Furthermore, Hamdi discloses the USB bus 106 includes two wires which carry power supply signal from the USB host controller 114 to the board 104 [106, Figure 1; col 11, lines 50-55; col 12, lines 60-65; and col 13, lines 38-41].

9. As per remarks, Applicants' argued that (4) Hamdi does not disclose, teach or suggest wherein said microprocessorless network adapter is configured to send said at least one

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peripheral device at least one command to go into a low-power sleep mode until said microprocessorless network adapter detects inbound data bound for said at least one peripheral device.

10. As to point (4), Hamdi discloses power manager to conserve power when the USB bus 106 is in a suspend mode, the codec 400 operates to power down to a low-power state at least a portion of its hardware components, and at least a portion of the hybrid circuit 122 remains active even during the suspend mode of the USB bus 106 so that incoming signals can be recognized and used by the remote wakeup unit 216 to request wakeup of the USB bus 106 [i.e. at least one command to go into a low-power sleep mode until said microprocessorless network adapter detects inbound data bound for said at least one peripheral device] [Figures 2 and 3; col 17, lines 3-15; and col 19, lines 6-19].

11. As per remarks, Applicants' argued that (5) Hamdi does not disclose, teach or suggest wherein said microprocessorless network adapter is configured to at least one of send a wake-up command to said at least one peripheral device and verify an active adapter of said at least one peripheral device before accepting the inbound data, as recited in claim 11.

12. As to point (5), Hamdi discloses when the decision block 622 determines that a wakeup event has been received [i.e. configured to at least one of send a wake-up command to said at least one peripheral device], and a decision block 626 to determine whether the wakeup has

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been successful [i.e. verify an active adapter of said at least one peripheral device] [col 19, lines 6-50].

13. As per remarks, Applicants' argued that (6) Hamdi does not disclose, teach or suggest network adapter is configured to perform automatic USB enumeration.

14. As to point (6), it is rejected for similar reasons as stated in previous Office Action. In addition, Hamdi discloses USB supports USB devices attaching to and detaching from the USB bus at any point in time and enumerating the USB bus is an ongoing activity that must accommodate dynamic changes in the physical bus topology [col 4, lines 29-36; and col 6, lines 1-6].

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1, 9-13, 18, 19, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morrow [US Patent Application No 2003/0038177], in view of Hamdi et al. [US Patent No 6,408,351].

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17. As per claim 1, Morrow discloses the invention as claimed including a computer network [Figures 1 and 2; and paragraphs 0002 and 0017], comprising:

at least one host computer [i.e. a host system] [32, Figure 2; and paragraphs 0009 and 0038];

at least one peripheral device [20, Figures 1 and 2; and paragraphs 0004 and 0038]; and
a microprocessorless network adapter interconnecting said at least one host computer and said at least one peripheral device [i.e. passive adapter] [40, Figures; and paragraphs 0038-0041].

Morrow does not specifically disclose

a USB hub interconnecting said at least one peripheral device and said microprocessorless network adapter.

Hamdi discloses

a USB hub interconnecting said at least one peripheral device and said microprocessorless network adapter [Figure 1; col 3, lines 41-col 4, lines 4; and col 13, lines 31-55].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Morrow and Hamdi because Hamdi's teaching of USB hub would provide a number of advantages including easy peripheral expansion, low cost transfer rate, protocol flexibility [Hamdi, col 3, lines 17-23].

18. As per claim 9, it is rejected for similar reasons as stated above in claim 1. Furthermore, Morrow does not specifically disclose wherein said microprocessorless network adapter is

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configured to manage power on said at least one peripheral device. Hamdi discloses wherein said microprocessorless network adapter is configured to manage power on said at least one peripheral device [i.e. bus-power peripheral device] [Abstract; col 1, lines 5-17; and col 13, lines 38-41]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Morrow and Hamdi because the teaching of Hamdi on bus-power would enable low power utilization of the peripheral codecs prolongs battery life due to its low power consumption [Hamdi, col 1, lines 56-col 2, lines 7].

19. As per claim 10, it is rejected for similar reasons as stated above in claim 1. Furthermore, Morrow does not specifically disclose wherein said microprocessorless network adapter is configured to send said at least one peripheral device at least one command to go into a low-power sleep mode until said microprocessorless network adapter detects inbound data bound for said at least one peripheral device. Hamdi discloses wherein said microprocessorless network adapter is configured to send said at least one peripheral device at least one command to go into a low-power sleep mode until said microprocessorless network adapter detects inbound data bound for said at least one peripheral device [i.e. power down to a low-power state] [col 14, lines 62-65; and col 17, lines 5-16]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Morrow and Hamdi because the teaching of Hamdi on bus-power would enable low power utilization of the peripheral codecs prolongs battery life due to its low power consumption [Hamdi, col 1, lines 56-col 2, lines 7].

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20. As per claim 11, it is rejected for similar reasons as stated above in claim 10.

Furthermore, Hamdi discloses wherein said microprocessorless network adapter is configured to at least one of send a wake-up command to said at least one peripheral device and verify an active status of said at least one peripheral device before accepting the inbound data [i.e. remote wakeup unit] [Figure 3; and col 15, lines 16-col 16, lines 13].

21. As per claim 12, it is rejected for similar reasons as stated above in claim 1. Furthermore, Hamdi discloses wherein said adapter is configured to perform automatic USB enumeration [i.e. enumerate the USB bus] [col 6, lines 1-6].

22. As per claim 13, Hamdi discloses USB enumeration is performed without software [i.e. cable that plugs into a port on a hub] [col 4, lines 5-10].

23. As per claim 18, it is rejected for similar reasons as stated above in claims 1 and 12. Furthermore, Morrow discloses at least one application specific integrated circuit [Figures 4 and 5; and paragraphs 0045, 0046]; and support electronics [20, Figures 1 and 2; and paragraphs 0004 and 0038].

24. As per claim 19, it is rejected for similar reasons as stated above in claim 13.

25. As per claim 32, it is rejected for similar reasons as stated above in claim 9.

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26. As per claim 33, it is rejected for similar reasons as stated above in claims 9 and 18.

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dustin Nguyen

Examiner

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A handwritten signature in black ink, appearing to read 'Dustin', with a long, sweeping horizontal stroke extending to the right.